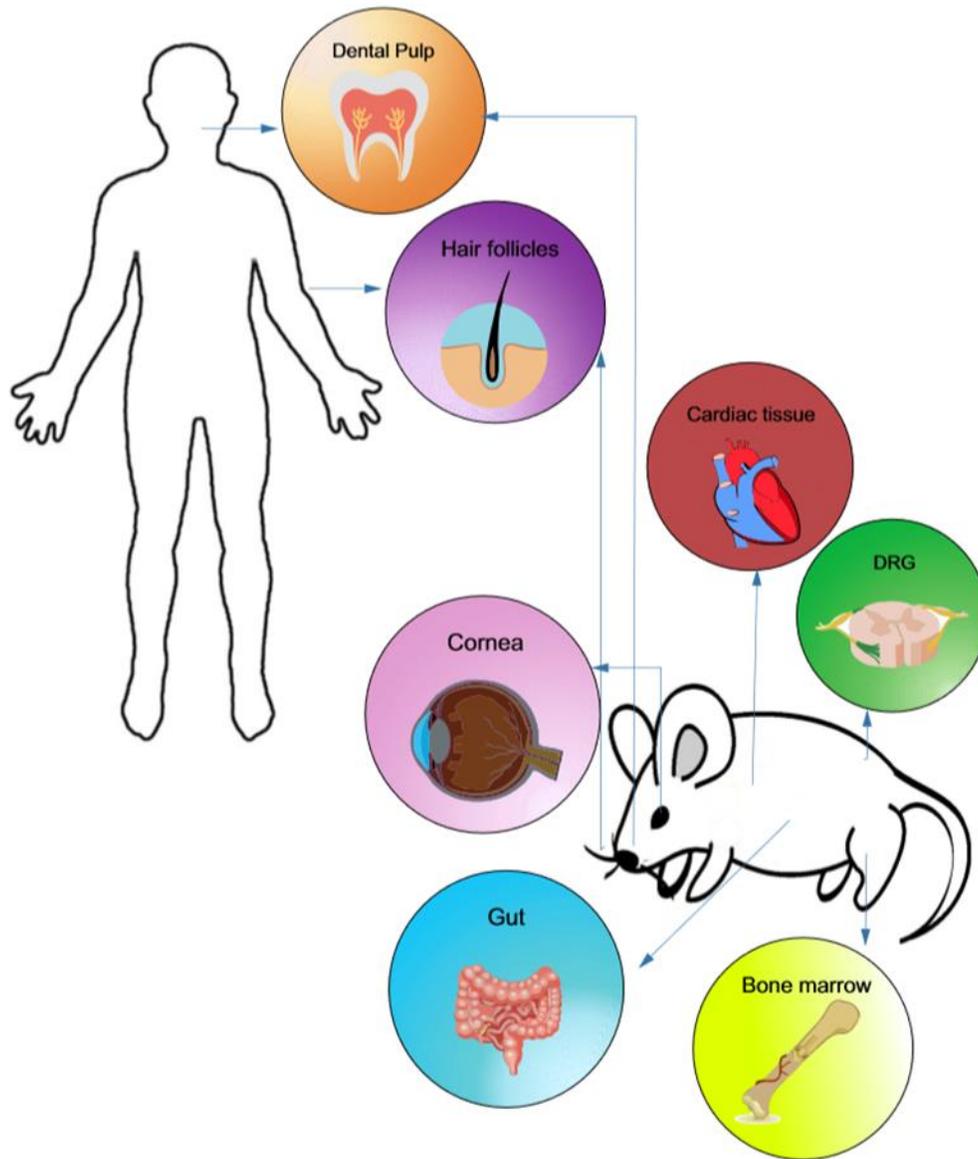
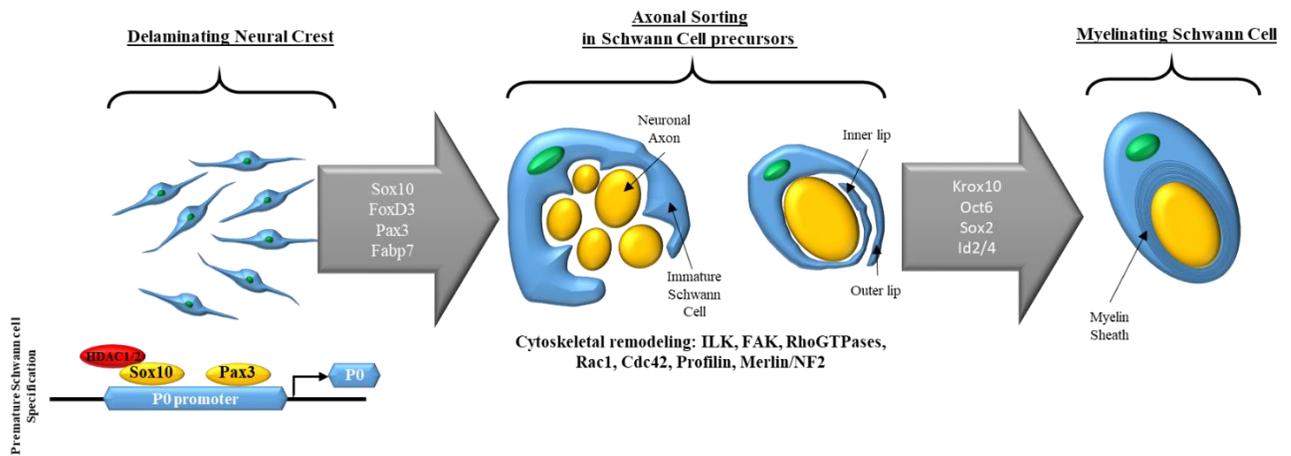


## Supplemental Information



**Supplemental Figure S1:** Adult sources for *in vitro* expansion of multipotent stem cells exhibiting an NC-like phenotype. From the above mentioned sources, only cells from dental pulp and hair follicles have been successfully isolated and studied in humans.



**Supplemental Figure S2:** A Neural Crest Stem Cell's journey to myelination. Delaminating, post migratory NC follow *Wnt* and *FGF* signals and upregulate key transcription factors like *Sox10*, *FoxD3* and *Pax3*. By recruiting *HDAC1/2*, myelin protein 0 is upregulated leading to a Schwann cell precursor phenotype. During this immature Schwann cell stage, Schwann cells initially approach multiple axons and after undergoing significant cytoskeletal reorganization, each one myelinates a single axon, a process referred to as axonal sorting. Finally, the mature Schwann cell envelopes along the neuronal axon with myelin sheath to facilitate saltatory electrical impulse conduction.